Chasing the Dragon

In Search of the Tic Tac Dough Dragon

By Kay Savetz

There were many villains in Apple II games that would steal the player's money, such as the guards in Lode Runner and the thief in Zork. But there was one digital foe that could steal real money from real people: the dragon on Tic Tac Dough.

Tic Tac Dough (technically, the title was "The New Tic Tac Dough") was a half-hour television game show that aired from 1978 to 1986. It was the first television game show to use computerized graphics: nine Apple II computers displayed the game board. At various times, the 3-by-3 grid of screens — arranged like a tic-tac-toe board — would display Xs and Os, question category names, a colorful lo-res screensaver — and that dragon.

Leaping lizards: Bishop's dragon emerges in the top-left corner of the board.

When the dragon appeared during the course of a game, the audience saw a short animation of its toothy face looming close. The player would lose their turn and any money they had earned in that round.

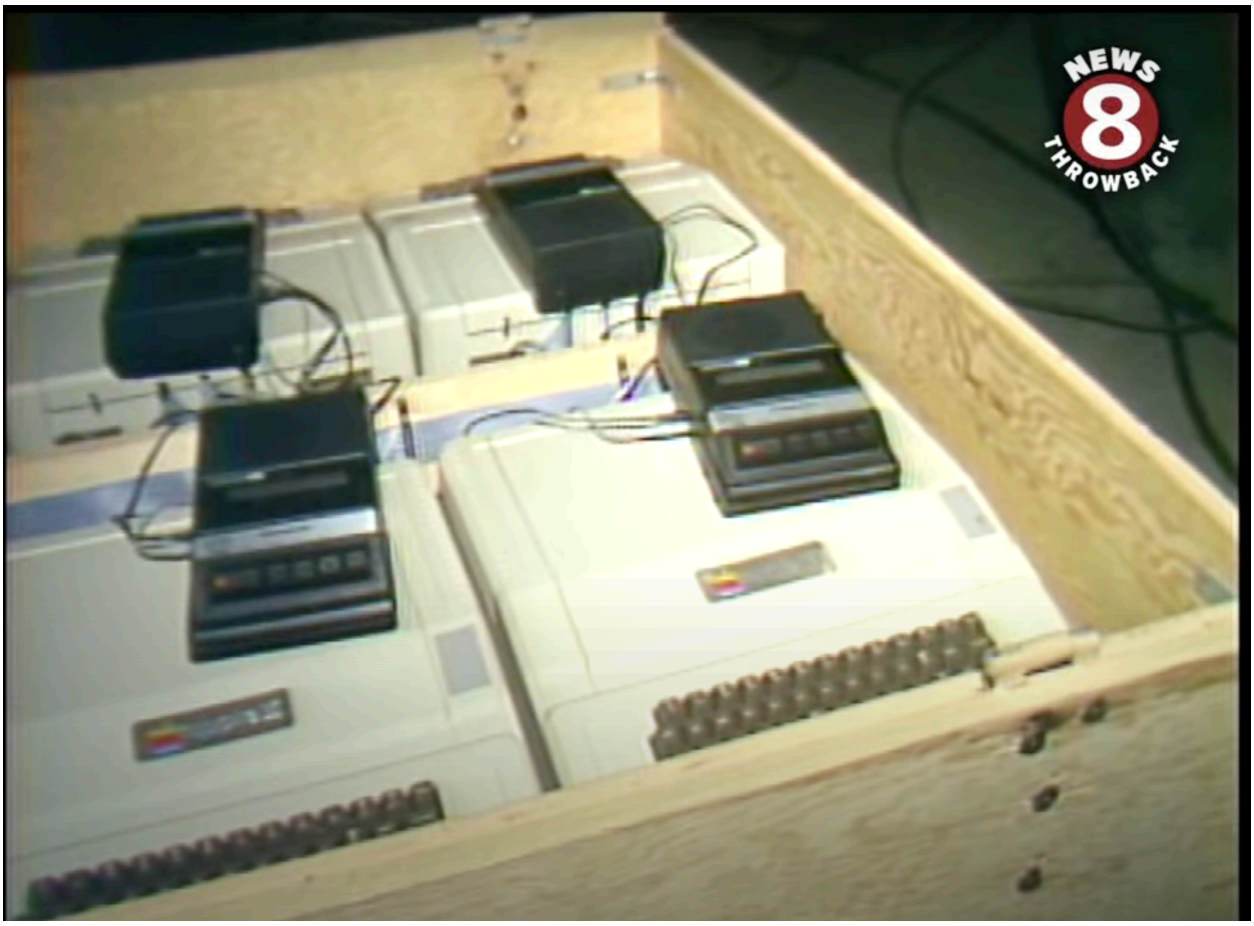
The computer system was built by Bob Bishop, an early Apple Computer employee. He was the first person to enable the Apple II to generate speech and to recognize human speech. He programmed the well-known Apple-Vision demo, among other accomplishments. Bishop died more than a decade ago, in 2014. But he provided some insight into the Tic Tac Dough project in his 2011 Kansasfest keynote speech and in a 2009 interview with Em Maginnis.

In that interview, Bishop said "CBS Television contacted me because they needed someone who knew how to write computer programs for the Apple II. They had bought nine Apple II computers that were supposed to run the monitors for this new Tic Tac Dough game, and they had a master (non-Apple) computer that was going to send communication signals to each of the Apples to tell them what to display on the screens." The controlling computer was an Altair 8800.

"They needed to put up a giant X, a giant O, a dragon, the names of the categories, whatever it is they wanted—somebody had to do that. And so they elected me! It was a fun little thing. I'd never done anything in television before, so it was my first chance to actually go behind the scenes and see what goes on in a TV station."

Maginnis asked how long Bishop worked on that show. "It was kind of a one-shot deal that lasted a few months. There wasn't that much to do—it was just a matter of programming the computer to do what they wanted. But it was fun because, as you know, when you first write a program, it never quite works right the first time, and even when you think you've got it debugged, it doesn't quite work. I remember we were doing the prototype and the emcee, Wink Martindale, would say, 'Now, we'll look at the categories,' and nothing would happen. Who's to blame? Everybody's pointing the finger at somebody else. Usually, it turned out it wasn't my fault, though." Interview audio, transcript.

I wanted to see those nine Apple II computers for myself. Was there a photograph or video somewhere? After a lot of research, I was able to catch a fleeting glimpse into the dragon's lair. In April 1981, San Diego's CBS channel 8 aired a three-part profile about game shows, showing the production process and what it takes to become a contestant. In part three of the series, they went behind the scenes of Tic-Tac-Dough.



Seen in a 1981 news report are these four Apple II computers, each controlling a separate screen on the Tic Tac Dough board.

Eight and a half minutes into the 11-minute video, there it is: a two second shot of four Apple II Plus computers in a wooden case (presumably five more computers were nearby, but not shown). In the video, each of the Apples has an identical portable cassette player on top. The show apparently didn't invest in expensive floppy disk drives; presumably, the game display code was loaded into each computer individually from its own cassette tape.

We don't see the Altair 8800 in the video. We can only guess about other technical questions. Did the host computer send commands to each Apple individually, or did it broadcast commands that were received by all nine Apples? Did they receive those commands using serial cards or the joystick ports? Or perhaps the system used the Apples' inbuilt cassette ports? That fleeting two-second shot doesn't provide those answers.

The very first version of Tic Tac Dough aired in 1956. The New Tic Tac Dough was hosted by Wink Martindale from its launch in 1978 until 1985, when he left the show for another project. In a 1982 interview with the *Courier-Post* newspaper of Camden, New Jersey, Martindale said, "It's the same program it always was. Oh, some of the things about it have been revised a little along the way. But it's really only changed from the standpoint of being computerized. In the old days the game board was made up of three barrels. The crew would roll them to show the different categories… Now we use nine Apple computers. They're tied in with a master computer, so we're able to do more in terms of categories. This season we'll have a lot of new surprise categories we've never used before."

Wink Martindale died in April 2025 at the age of 91. However memories of the dragon live on. I found multiple people on X (formerly Twitter) lamenting that the dragon scared them as kids. The contestants whose encounter with the dragon meant losing game show prize money surely remember it too.

Kay Savetz's first experience with Apple II graphics was watching Tic Tac Dough. Kay was definitely not afraid of the dragon. At all. Find Kay on Bluesky.

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